REMARKS

Claims 1, 17, 19 and 20 were previously presented. Claims 2-16, 18 and 21-37 are original. Claims 38-44 have been previously cancelled.

The Examiner has objected to the terminology "rectilinear" in claim 1 for introducing subject matter not included in the application as filed and for being ambiguous. The Applicant respectfully disagrees with the Examiner. For example, the Random House Unabridged Dictionary defines the term **rectilinear** as "1. forming a straight line; 2. formed by straight lines; **characterized by straight lines**; 4. moving in a straight line."(emphasis added) The Applicant respectfully submits that the terminology rectilinear used to characterize the body therefore clearly and unambiguously means that the **body is generally straight**. In addition, the Applicant respectfully submits that this characteristic of the body is supported by the drawings of the Application as originally filed, and that therefore the use of this term does not introduce new matter to the applications. Accordingly, the Applicant respectfully requests that the rejections of claims 1-37 under 35 USC 112 be withdrawn.

The Examiner rejected claims 1-37 under 35 USC 103(a) as being unpatentable over Heron et al., US Design Patent 295,011, in view of Mosley, US Design Patent Des.397,018.

Claim 1, reads:

1. An implement handle graspable by a hand of an intended user and connectable to an implement head, said hand including a thumb, an index finger, a middle finger, a ring finger and a small finger, each extending from a palm, each of said fingers including a pair of

corresponding finger lateral surfaces and a corresponding distal pulp; said implement handle comprising:

- **a generally elongated and substantially rectilinear body** defining a body longitudinal axis, a body forward end for connection to said implement head and a longitudinally opposed body rearward end; said body also defining a body top surface and a substantially opposed body bottom surface;
- said body defining **an encirclable section** located intermediate said body forward and rearward ends, said encirclable section being configured and sized so as to be graspable between at least a portion of said palm and at least a portion of at least either one of said middle, ring or small fingers at least partially encircling said encirclable section;
- said body top surface being provided with **an identifiable thumb rest area** located intermediate said encirclable section and said body forward end for contacting at least a portion of the distal pulp of said thumb, said thumb rest area defining a rest area forwardmost location;
- said body bottom surface being provided with **a substantially concave indentation** defining an indentation surface located intermediate said encirclable section and said body forward end for contacting at least a portion of one of said finger lateral surfaces of said index finger with the latter in substantially perpendicular relationship with said body longitudinal axis;
- said indentation surface having **a substantially arcuate cross-sectional configuration defining an indentation first end located substantially adjacent said encirclable section and an indentation second end located substantially adjacent to said body forward end, said indentation second end defining an indentation end point; said body defining a cross-sectional first reference plane extending in a**

substantially perpendicular relationship with said body longitudinal axis and intercepting said indentation end point, said indentation surface being configured and sized so that at least a section of said indentation surface is positioned forwardly relative to said first reference plane; and

said **encirclable section having a substantially fusiform configuration** tapering towards said body rearward end and tapering forwardly towards both said thumb rest area and said indentation;

whereby, in use, said intended user is able to position said thumb so that said distal pulp thereof abutingly contacts said thumb rest area and to position said middle, ring and small fingers such that said middle, ring and small fingers are wrapped around said encirclable section for pressing said encirclable section against said palm while said index finger is positioned in said indentation with at least a portion of said one of said finger lateral surface thereof and said pulp section thereof in abutting contact with said indentation surface." (emphasis added)

The Applicant respectfully submits that the emphasized limitations are not all disclosed by Heron. Indeed, Heron describes a knife including an indentation for receiving an index finger thereinto. However, if a plane similar to the claimed reference plane were defined in Heron, this plane would be placed in front of the indentation **as the indentation shown in Heron does not curve back longitudinally towards the rear of the knife illustrated thereinto**. Accordingly, the Applicant respectfully submits that amended claim 1 is not taught by Heron.

Furthermore, the Applicant respectfully submits that the claimed invention is also not obvious in view of Heron. Indeed, **the claimed invention has unexpected functional advantages** with respect to the cited art and is not a trivial variation in design. More specifically, as mentioned at numerous places in the specification, in addition to serving as a guard to prevent a finger from moving, the claimed indentation produces a synergetic effect between the shape of the indentation and the orientation and positioning of the indentation that

- allows for gripping the handle through a combination of power and precision grips, hence allowing for a firm grip to be obtained without sacrificing on precision and accuracy (see for example page 12, 1st paragraph);
- corresponds to the normal physiological alignment of the digits when the latter are flexed separately at the metacarpophalangeal and proximal interphalangeal joints so that their respective axes physiologically converge towards the scaphoid tubercle; also, the configuration of an encirclable section of the claimed handle allows the digits to be ergonomically wrapped, at least partially therearound; furthermore by having the digits urge the encirclable portion against the palm of the hand of the user, the benefits of a power grip including strength and force are provided. Yet furthermore, by allowing the index and thumb fingers to be in opposition relative to each other, benefits of a pinch grip, including precision and accuracy are also provided. Yet furthermore, the configuration of the claimed handle is such that all of the fingers as well as the palm are provided with optimized contact surfaces so as to reduce the need for a strong gripping force to be applied and so as to distribute the stress on a larger contact surface hence reducing the pressure on the pressure points (see for example page 28).

Accordingly, the Applicant respectfully submits that the claimed invention is not obvious in view of Heron.

Furthermore, the Applicant respectfully submits that amended claim 1 is not anticipated by Mosley as the handle shown in this document **clearly does not have a rectilinear body as claimed in claim 1**, and illustrated in all drawings, but instead has a curved body. The Applicant respectfully submits that the claimed shape is not provided for esthetic or visual appearance reasons but instead adds functionality to the handle and interacts with the presence of the thumb rest area and of the indentation surface to **provide a handle that is more ergonomic than any of the handles shown in Heron and in Mosley. What seems a relatively small change in shape and the addition of small details to either of the handles shown in Heron and Mosley provides a new and unexpected result of a more ergonomic handle** allowing easily an intended user to use either a "hammer grip" or a "pinch grip" and to easily go from one grip to the other as needed with minimal risks of dropping the handle, which could cause injuries to the intended user, for example in the case in which the handle is the handle of a knife, as in the art cited by the Examiner. As stated in the application as filed (last paragraph of p. 27 and p. 28), and as included partially in the whereby clause of amended claim 1:

"In use, the intended user first positions his/her thumb 14 so that the distal pulp section 28 thereof abutingly contacts the thumb rest area 42. The middle, ring and small fingers, 18, 20 and 22 are then wrapped around the encirclable section 40 for pressing the latter against the palm 24 while the index finger 16 is positioned in the indentation 46, with at

least a portion of the lateral section 26 and of the pulp section 28 thereof in abutting contact with the indentation surface 48.

It should be noted that during oblique flexion of the last four digits, the index, middle, annular and small fingers 16 through 22, only the index ray flexes towards the median axis in a somewhat perpendicular relationship with the body longitudinal axis 30. This corresponds to the normal physiological alignment of the digits when the latter are flexed separately at the metacarpophalangeal and proximal interphalangeal joints so that their respective axes physiologically converge towards the scaphoid tubercle. The configuration of the encirclable section 40 allows the digits to be ergonomically wrapped, at least partially therearound.

By having the digits 16 through 22 urge the encirclable portion 40 against the palm 24, the benefits of a power grip including strength and force are provided. Also, by allowing the index and thumb fingers 16, 14 to be in opposition relative to each other, **benefits of a pinch grip, including precision and accuracy are also provided**.

Furthermore, all of the fingers 14 through 22 as well as the palm 24 are provided with **optimized contact surfaces** so as to reduce the need for a strong gripping force to be applied and so as to distribute the stress on a larger contact surface hence reducing the pressure on the pressure points."

In conclusion, the Applicant respectfully submits that claim 1 is neither anticipated by nor obvious in view of Mosley.

Furthermore, the Applicant respectfully submits that there is no suggestion to combine Mosley and Heron. Indeed, these two documents present drawings of very differently shaped handles. Since they are industrial designs, there is no description in these documents and therefore no suggestion in any of these documents that they may be combined. As mentioned hereinabove, the features of the claimed invention have been provided **to interact with each other to create a synergy providing an ergonomic handle that better conforms to the anatomy of the human hand** than any of the handles presented by the Examiner in the Office Action. The claimed invention has not been conceived by merely adding features to each other without any interaction between these features, but instead has been conceived to take into account the anatomy of the human hand to provide an improved handle improving on the ergonomicity of prior art handles. **The features of the claimed handle interact synergistically to produce an unexpectedly ergonomic handle.**

Furthermore, the handles of Mosley and Heron are held very differently from each other by intended users due to the fact, among other reasons, that the sections thereof that are encirclable by the fingers of the intended users are at different angles. For this additional reason, the Applicant respectfully submits that there would be no motivation to combine these two references as the resulting handle would be used very differently from them manner in which each of the handles is individually used.

In addition, the Applicant respectfully submits that the claimed invention meets a **long-felt need that others have failed to address and experienced an unexpected commercial success**.

As evidence to the long-felt need and failure of addressing this need by others, the Applicant submits herewith executed declarations by 3 experts in the field of cooking utensils/accessories. As stated in the affidavit of Daniel Trottier, a perfect implement handle would be one that provides for

(a) proper position from an orthopedic view point, to reduce stress in use

(b) preset positioning of the hand for both the thumb, index finger palm and remaining fingers

(c) a high degree of safety by constraining the hand to remain in its preset position

(d) meeting the above requirements in a comfortable grip and in a shape and form that allows multiple different hands of different sizes to share all of the benefits

(e) during usage of the tool to which the handle is attached to, easily performing the task to which the tool is created for

(f) usability if a firm grip or a precision grip is required so that both of these grips are achievable within one handle shape

(g) usability with a large interval of applied force

(h) adaptability to both left and right handed users.

Each year, manufacturers create supposedly improved handles in the goal of approaching such a "perfect" implement handle. **However, despite the need for such a handle, as**

exemplified by the ongoing production of new types of handles, none of the multitude of handles currently in existence meets all these criteria.

Another expert, Christopher Hrushowy, states that the perfect handle for cookware needs to allow for a good and comfortable grip, while allowing the user to manipulate the cookware in a way that is safe and such that, when food is added to a vessel thus adding weight, the handle performs equally as well. In addition, the ideal handle should allow for manipulation in a way that the user can perform precise actions such as dribbling sauce onto food, transferring the contents of a cooking vessel to another vessel and other similar tasks in a way that the user does not have to change their grip or positioning on the handle. In closing, the handle to be considered the ideal handle must be constructed in a way that there is a clear and obvious way to hold the handle, that this is comfortable to use and manipulate for all purposes and that it allows for the variance in different users hand sizes so as to allow all user the same functionality. **To his knowledge, no handle currently on the market satisfies all these criteria, once again showing the failure to address a long-felt need.**

Finally, the third expert, Richmond Lisser, shows that there has been a need for a long time in the industry for a truly ergonomic handle for use with kitchen tools and gadgets as well as other "hand held" items. The approach taken by most designers and inventors is to create either a comfortable grip by introducing tactile materials, curved sections or finger grooves to make holding the tool easier and other various design and inventive elements.

More specifically, there are in essence two different types of handles, those that form a so-called pencil grip and those that form a so-called hammer grip. In addition, there are handles that have ribbed or countered sections that fall into either a pencil or hammer grip type. A pencil grip is created when the index finger and thumb are in close proximity to one another in relation to being held/applied onto a handle. The handle must be thin/narrow for a pencil grip; this type of grip is used for controlling a tool, where more motor control and dexterity are required. A hammer grip is the complete opposite, in that a more bulbous or massive handle is required for maintaining a firm grip on the handle. A hammer grip is used to retain control of the tool during usage, countering the weight being applied against the handle as well as being applied where force is required.

All the handles that exist today they are made for either a pencil or a hammer grip as the requirements for these two types of grip seem to be contradictory. The current mind set for handle design is that you make a handle for either a pencil or a hammer grip.

Hence, **there is a long-felt need to have a handle in which a pencil grip and hammer grip exist at the same time,** with no effort, special manipulation or change of one's hand position on the handle. From a consumer point of view, such a handle would provide comfort, ease of use and increased dexterity, reducing wrist fatigue, slippage and improving general handling of tools. In addition, from a manufacturing standpoint, there is a need to find an all encompassing handle design to be applied to a multitude of hand held tools. **However, despite the numerous efforts from many designers, no such handle currently**

exists. There exist no universal handle usable for all kitchen tools, gadgets, utensils and accessories that allow for a universal grip.

As stated in the affidavits of these three experts, the claimed handle meets these long-felt needs.

Regarding commercial success, the Applicant has successfully licensed the claimed invention to a first party and is currently close to licensing the claimed invention to a second party. An affidavit by the Applicant stating details about these licensing deals is attached hereto, as well as the actual contractual documents executed by the licensees. Despite the numerous handles currently on the market, the first party has agreed to pay **relatively large royalties** to the Applicant (over 10 percents) and to **pay royalties for a minimum number of items, regardless of actual sales**. The Applicant respectfully submits that this constitutes remarkable commercial success in such a crowded field and is further evidence that the claimed invention is not obvious. Evidence that the commercial success is due to the claimed invention and not to marketing efforts or other similar criteria is found in point 16.1 of the licensing agreement which states that securing a patent from the above mentioned patent application is a requirement for continuous enforceability of the agreement.

Therefore, the Applicant respectfully submits that the claimed handle is not obvious in view of Herron and Mosley. Indeed, such handles have been available for a relatively long time. However, despite the long-felt need of a handle meeting the above-enunciated criteria, no single handle incorporating all the claimed elements are known to the Applicant and to

many experts in the field. Furthermore, the Applicant has a large commercial success in commercializing the invention through licensing. Accordingly, the Applicant respectfully submits that combining the two documents cited by the Examiner to arrive to the claimed invention would not have been obvious to the person skilled in the art.

In view of the above, the applicant respectfully requests that the rejection of claim 1 in view of Heron and Mosley be withdrawn, along with the rejection of claims 2-37 that depend directly or indirectly thereon.

It is respectfully submitted that when the rejection of the claims be reviewed in light of Applicant's arguments, the invention without a doubt should be considered patentably distinguished over the currently applied references. It is now believed the above application is in order for Allowance and such action would be appreciated.

Very Respectfully submitted.

Louis Tessier, Reg. No. 45,289
Patent Agent